

Simple Hydraulic Control and Treatment Solutions to Wet Weather Pollution and Other Wastewaters: CSOs, SSOs, Stormwater, Industrial Wastes and Reuse

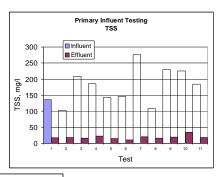


High Rate & High Efficiency Compressible Media Filtration with Low Flow Backwash Requirements





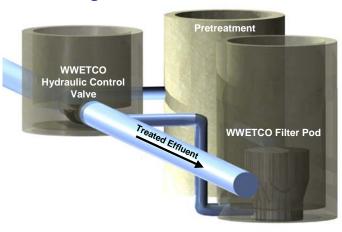
Full-Scale Facilities

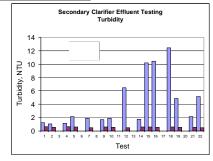


Performance

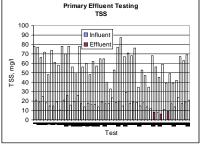
Testing Results

Drainage Network Stormwater Controls



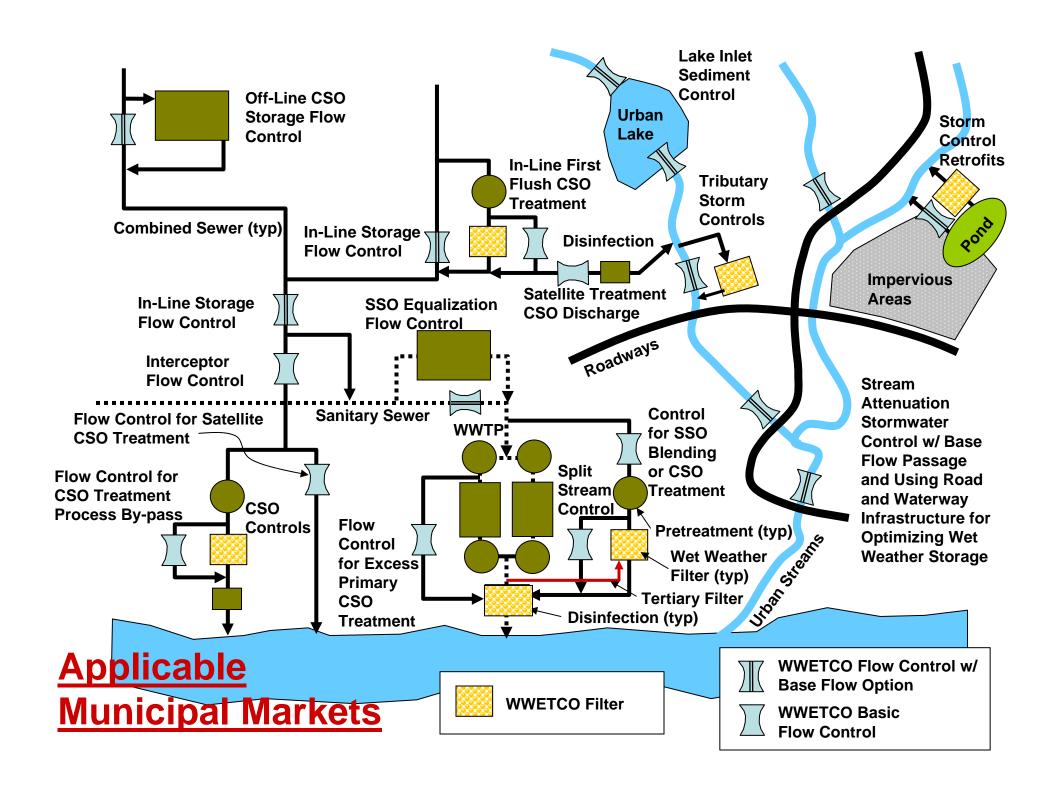


- Passive Hydraulic Control
- No Mechanical Parts
- Operates on Drainage Hydraulics
- Does not Hinder Existing System Capacity



WWETCO
Hydraulic Control







WWETCO Project in Columbus, GA

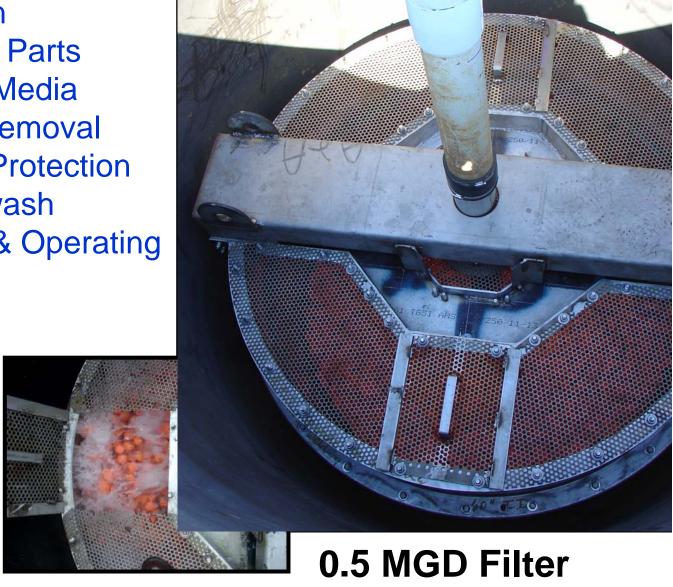
- Designed
- Managed Construction
- 5-Years Operation
- National EPA
 Demonstration Testing



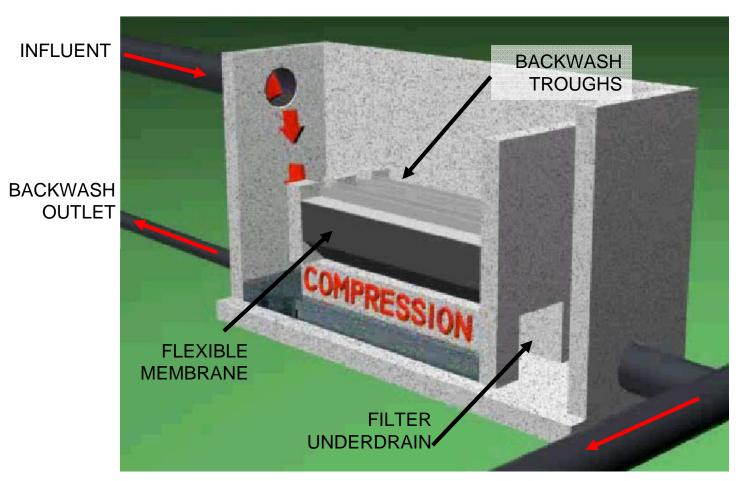
WWETCO Filter

Patented

- Passive Design
- No Mechanical Parts
- Compressible Media
- Higher Mass Removal
- Breakthrough Protection
- Efficient Backwash
- Lower Capital & Operating Costs
- Simple O&M
- Applications:
 - CSO
 - Wastewater
 - Stormwater
 - Tertiary Filter
 - Industrial



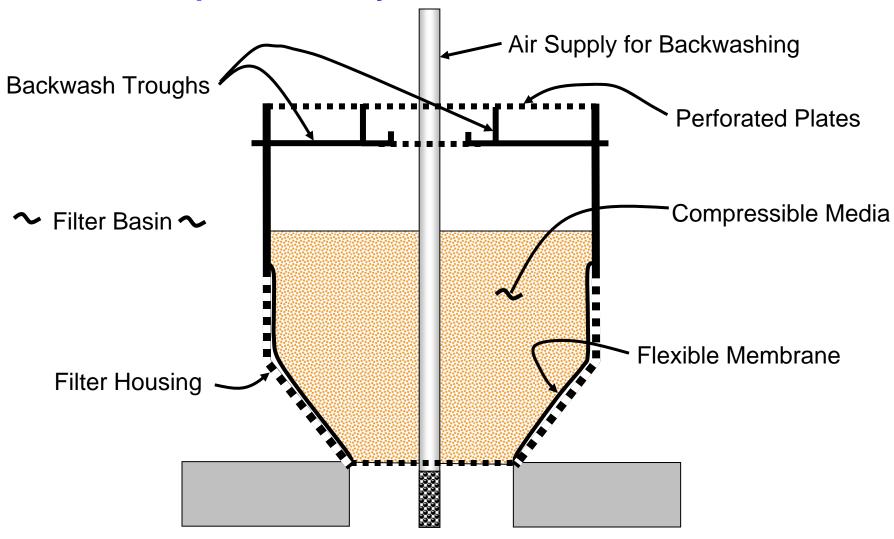
STRIP FILTER COMPONENT DIAGRAM



EFFLUENT

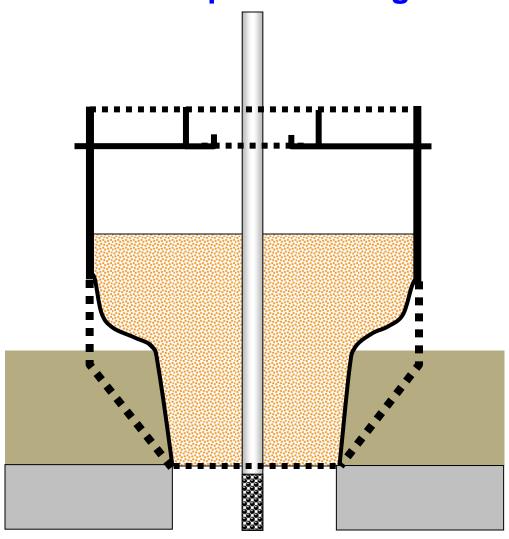
WWETCO Filter Drained of Liquid at Ready Position

Patented

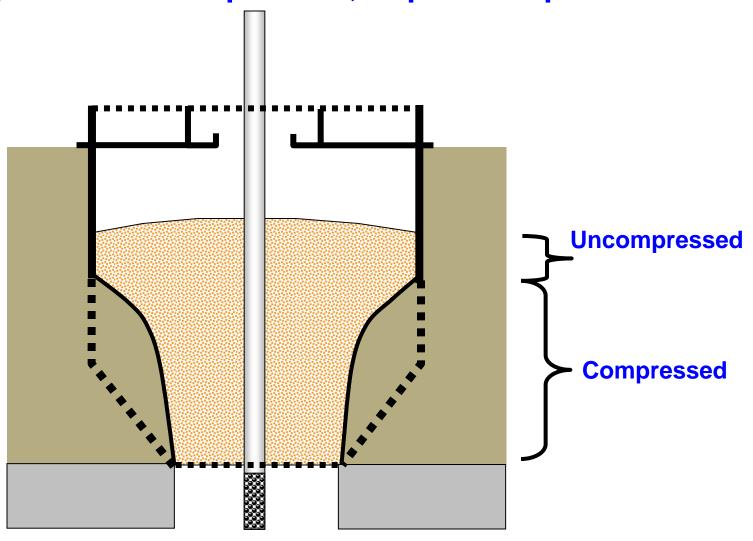


➤ Filtered Water Underdrain ➤

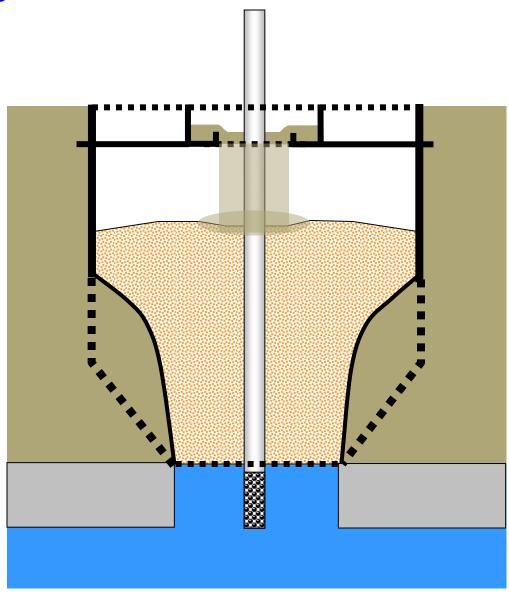
WWETCO Filter Basin Filling – Media Compression Begins



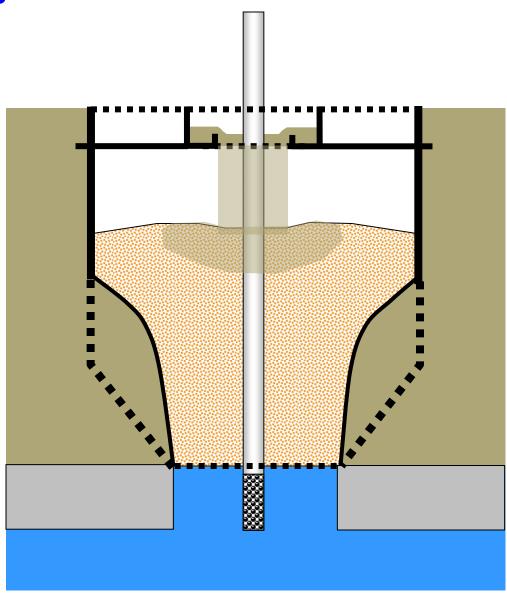
WWETCO Filter Basin Filling – Bottom compressed; Top Uncompressed



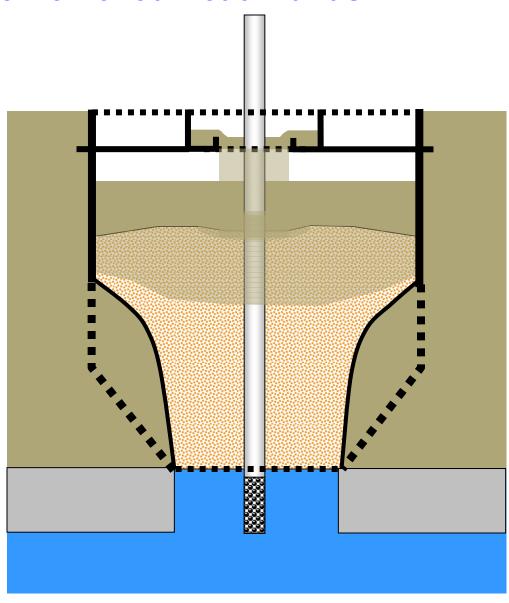
WWETCO Filter Filtering Begins



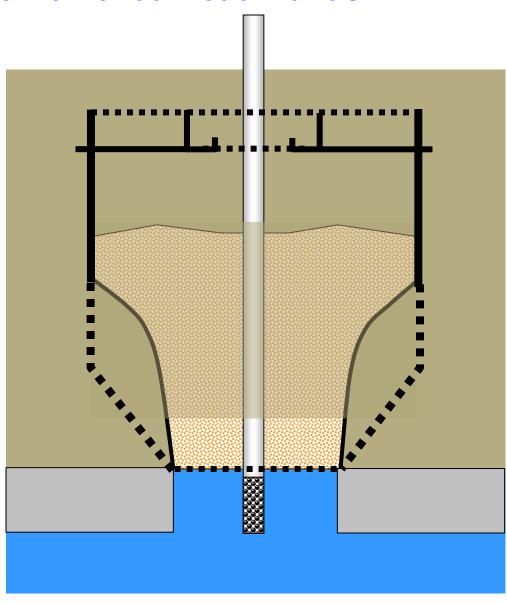
WWETCO Filter Filtering Begins



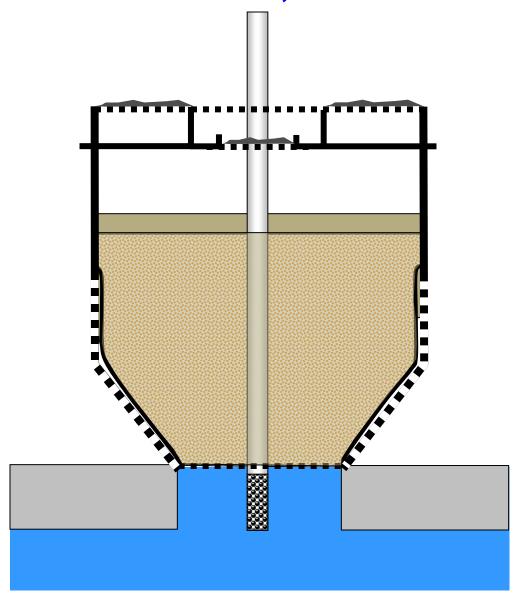
WWETCO Filter As Solids are Removed Head Builds



WWETCO Filter As Solids are Removed Head Builds

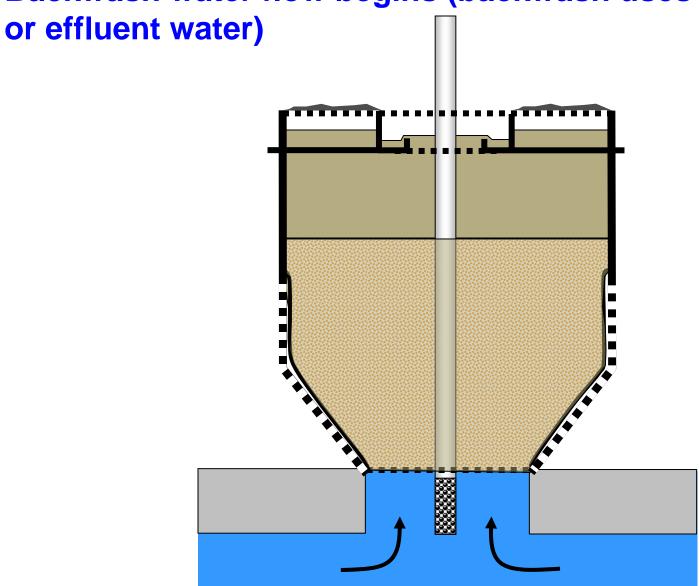


WWETCO Filter After Head Reaches Max Level, Basin is Drained

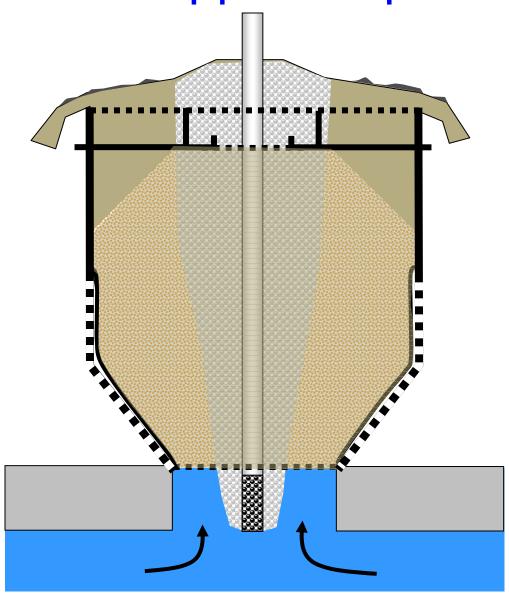


WWETCO Filter

Backwash water flow begins (backwash uses either influent

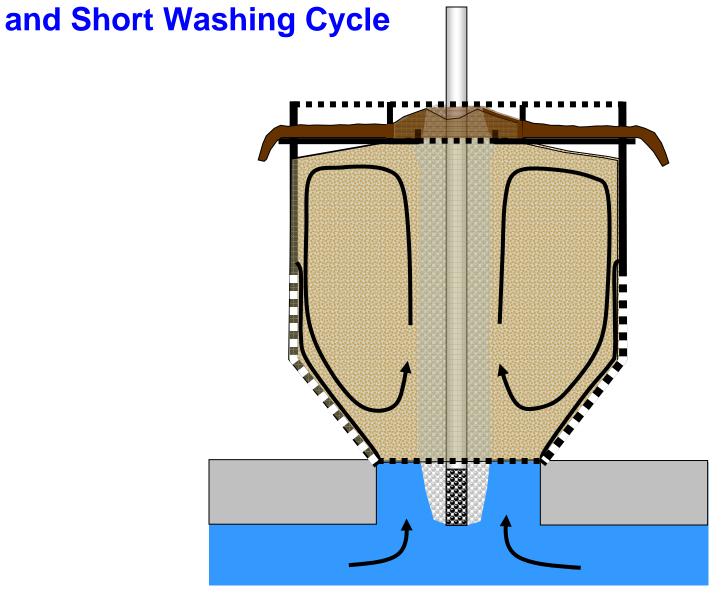


WWETCO Filter Blower is initiated and top perforated plate is cleaned



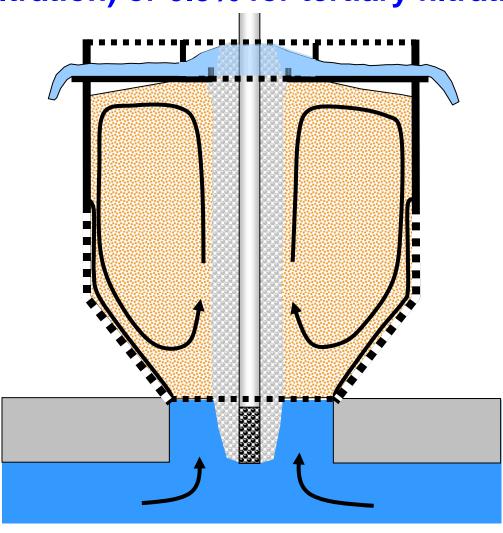
WWETCO Filter

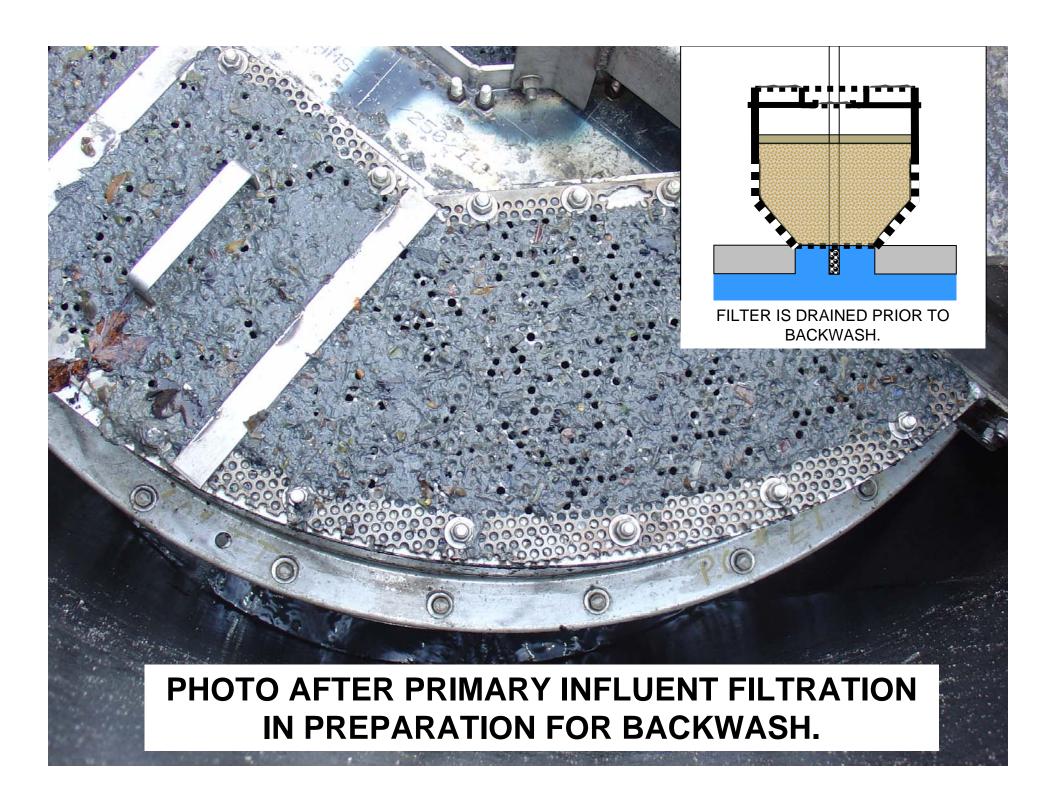
Optimized Backwash by Central Draw-off with Minimal Flow

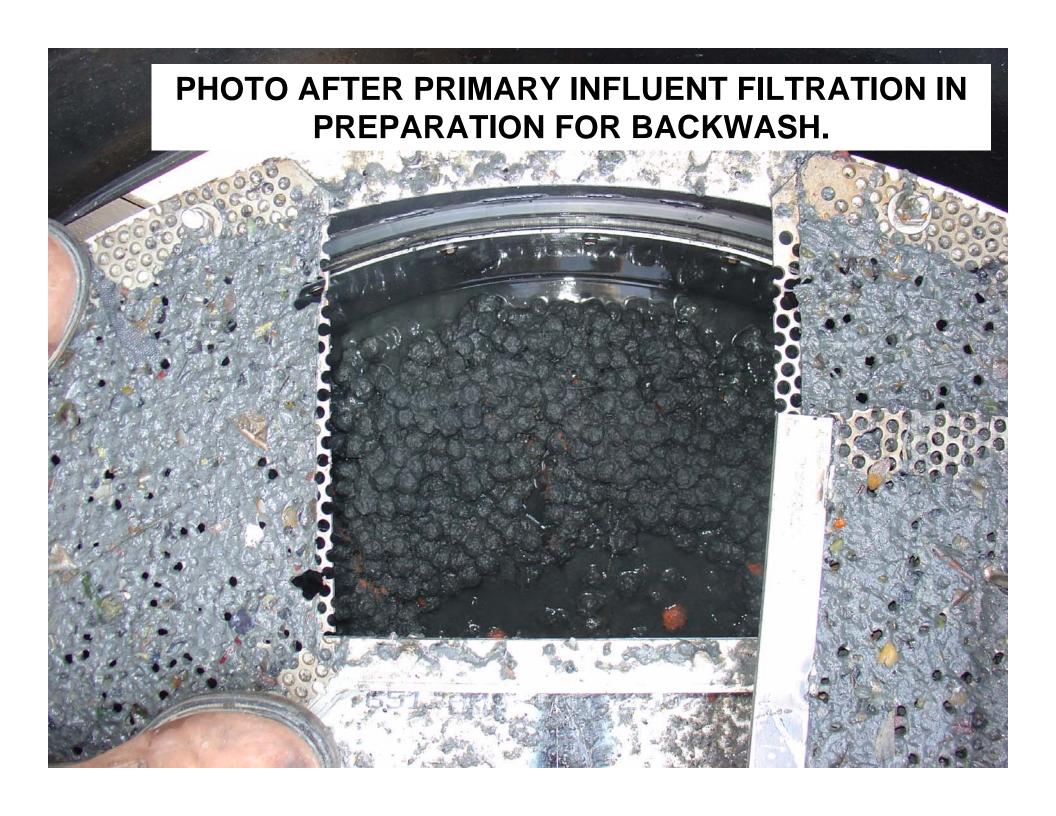


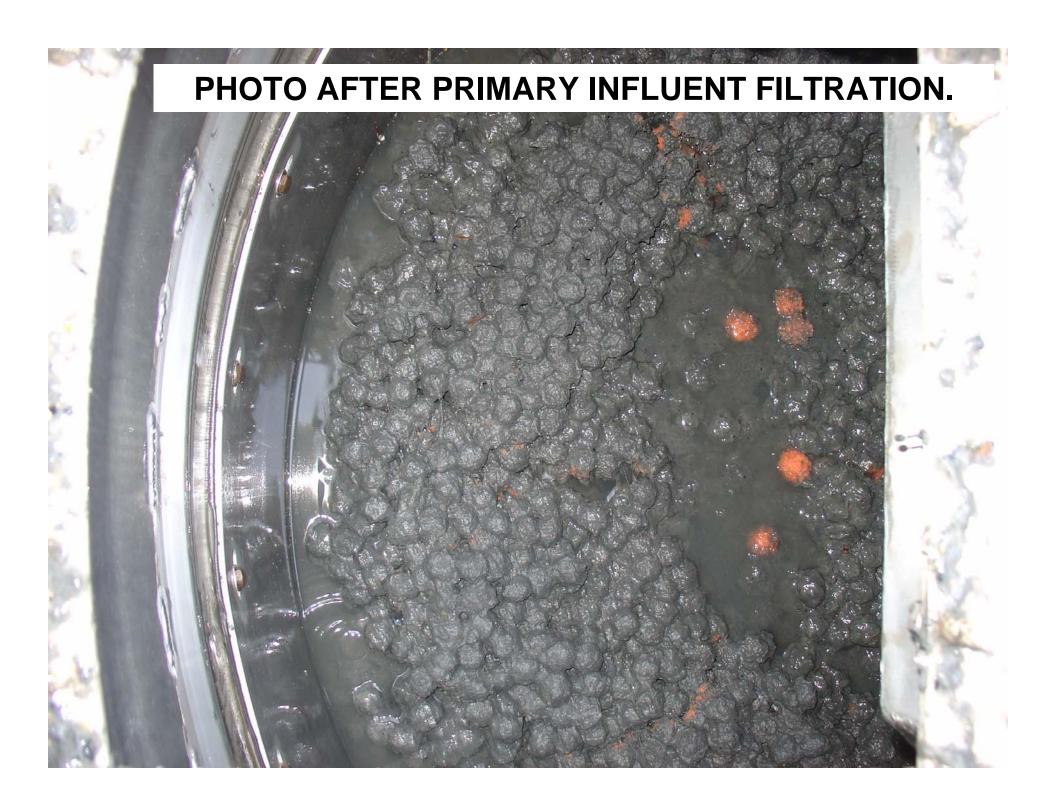
WWETCO Filter

After 20 to 30-minutes Backwash is complete and media is clean using only 2% to 3% of filtered water to clean the filter (dirty water filtration) or 0.5% for tertiary filtration.



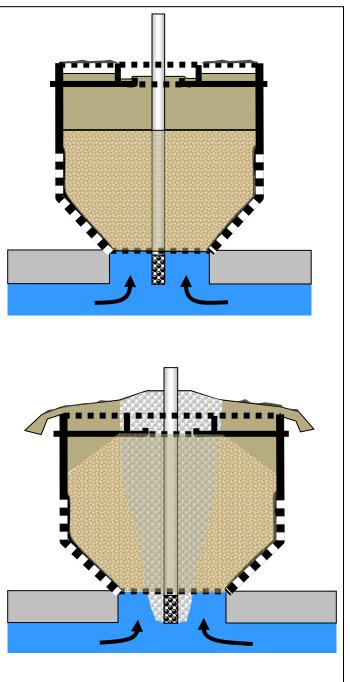






BACKWASH WATER FLOW BEGINS, CLEANING THE TOP PERFORATED PLATE.





Optimized Backwash by Central Draw-off with Minimal Flow and Short Washing Cycle

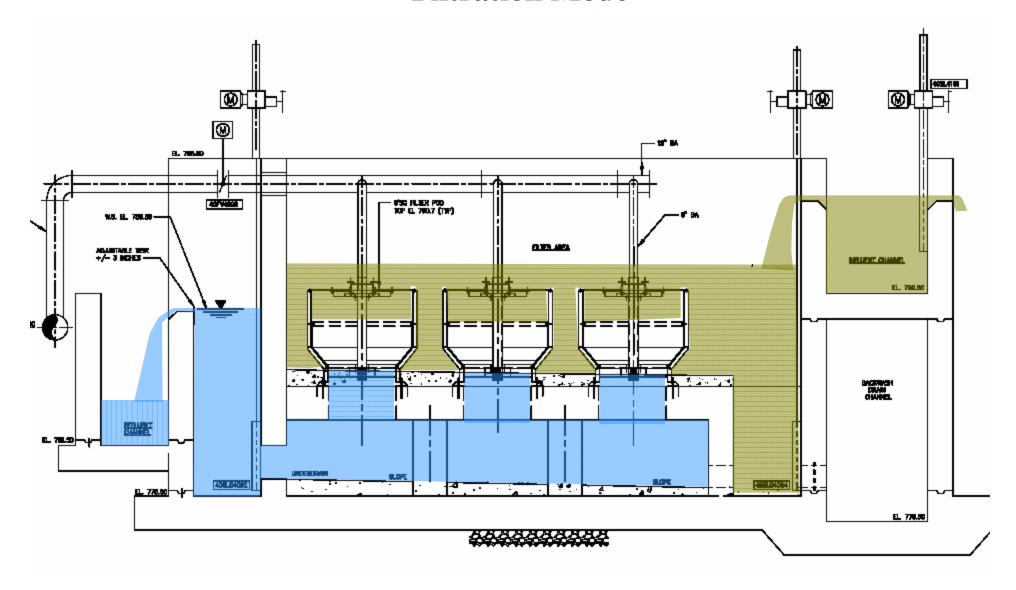


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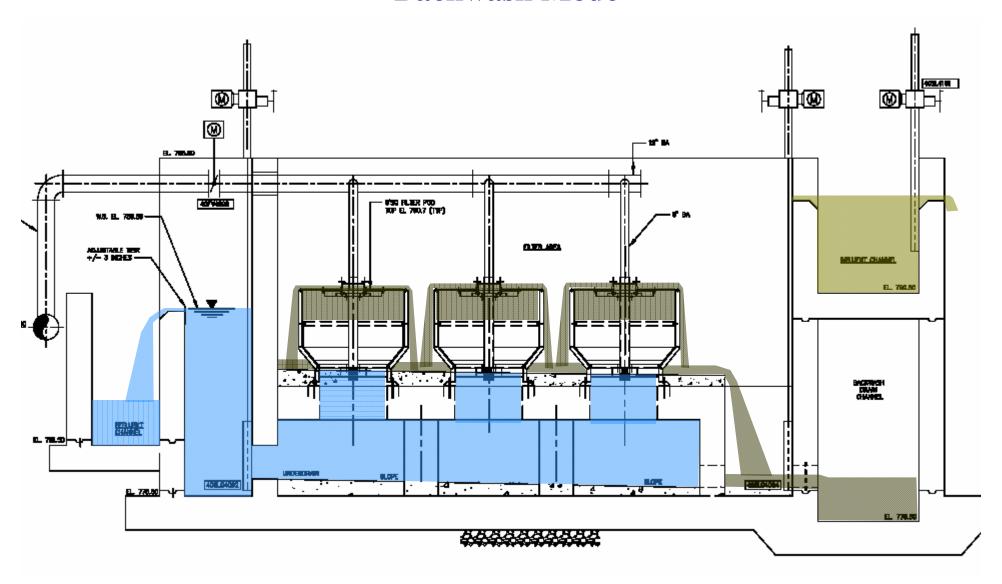




Atlanta CSO Treatment - West Side Facilities - Section View Filters Filtration Mode

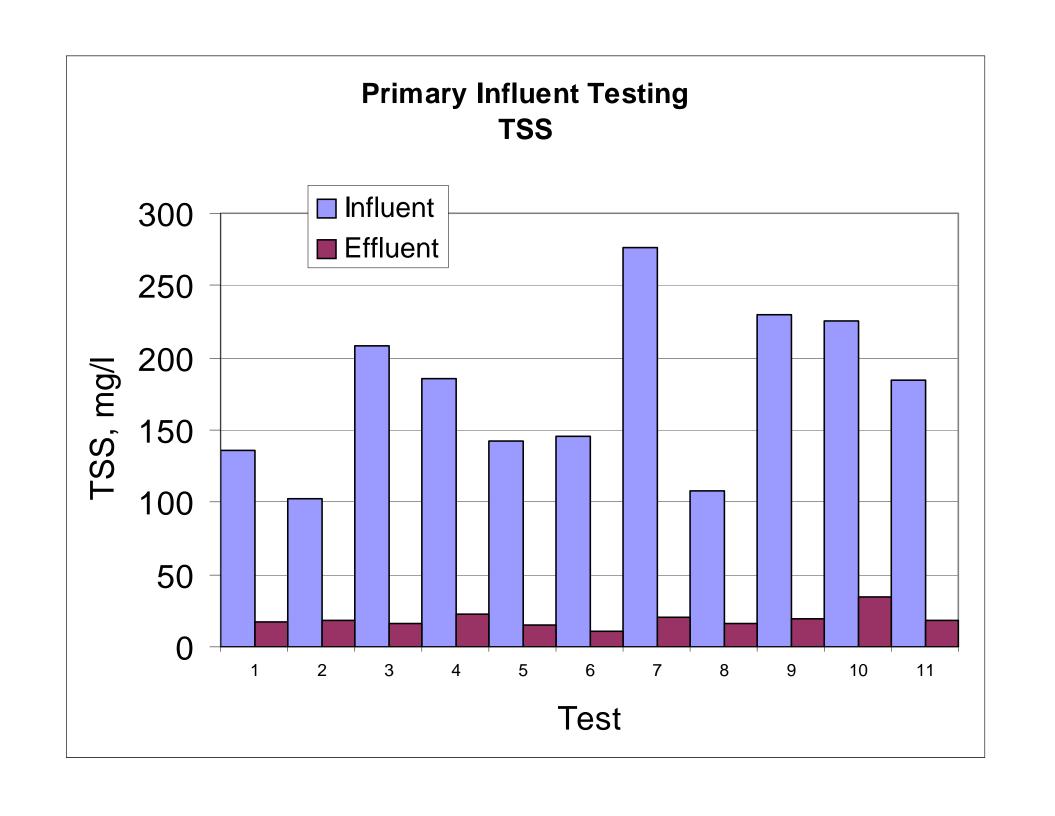


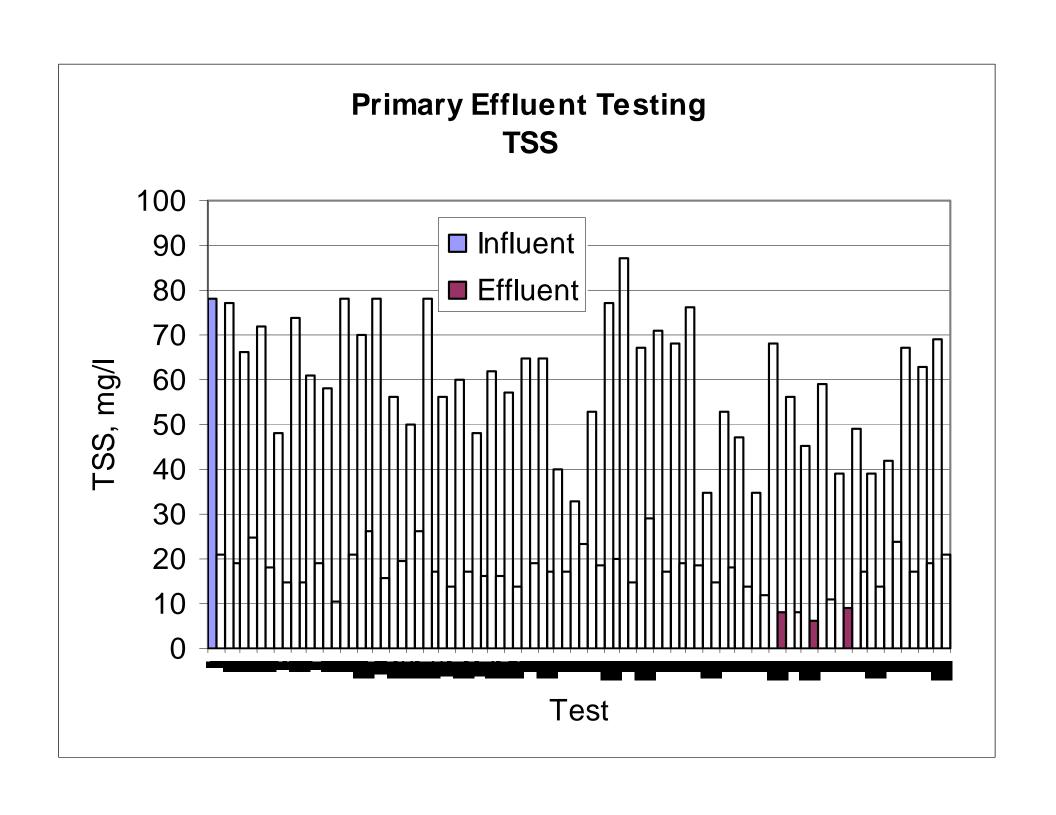
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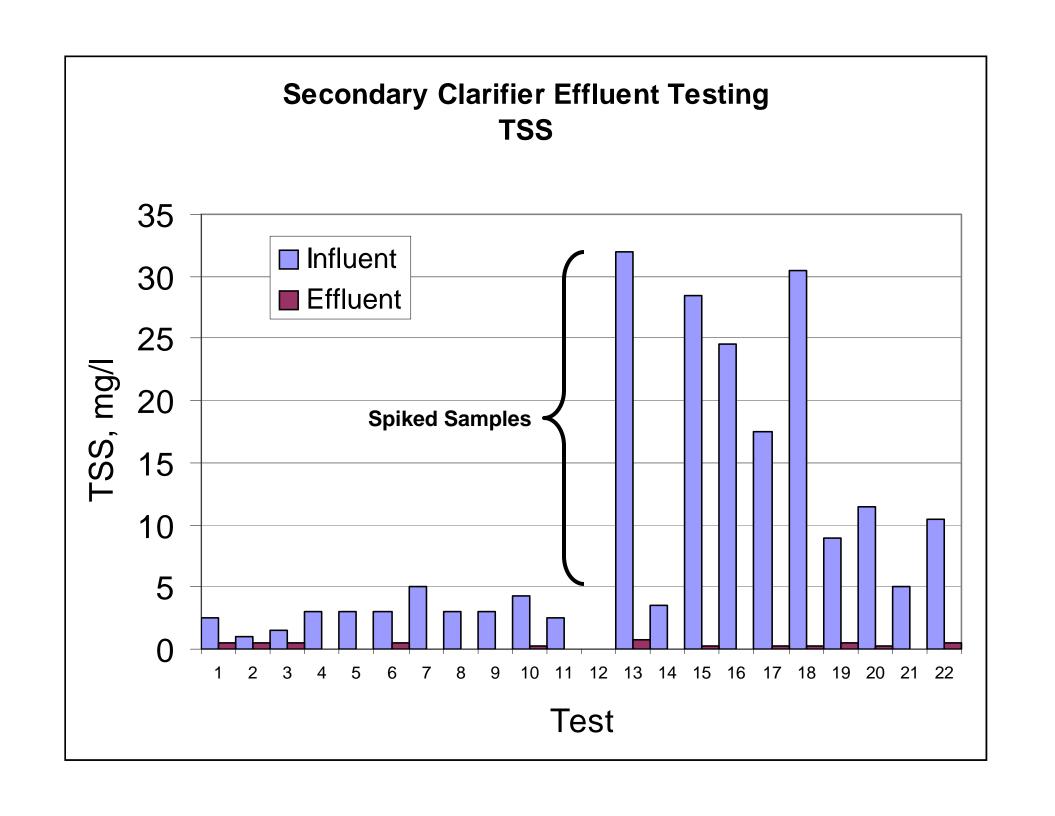










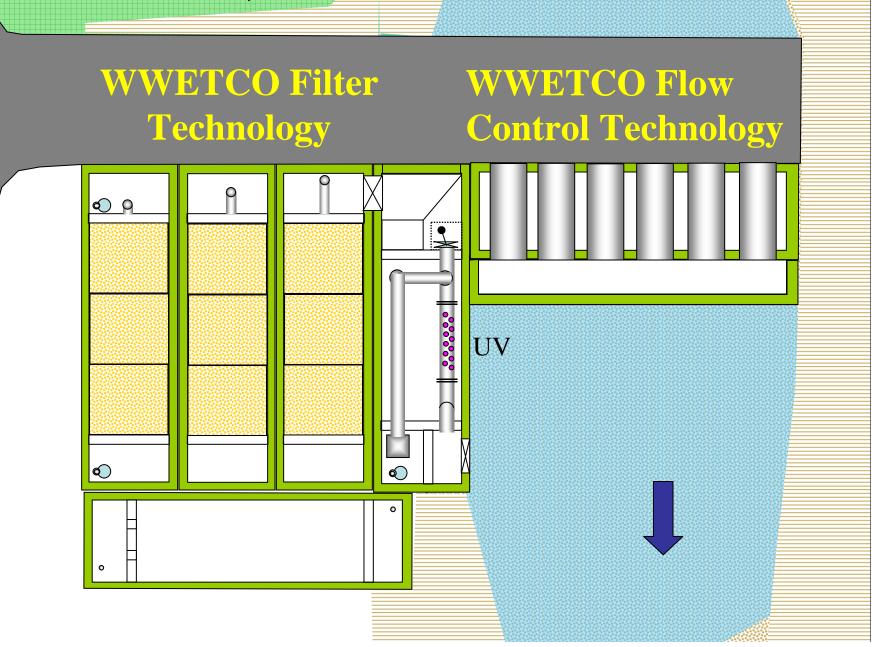




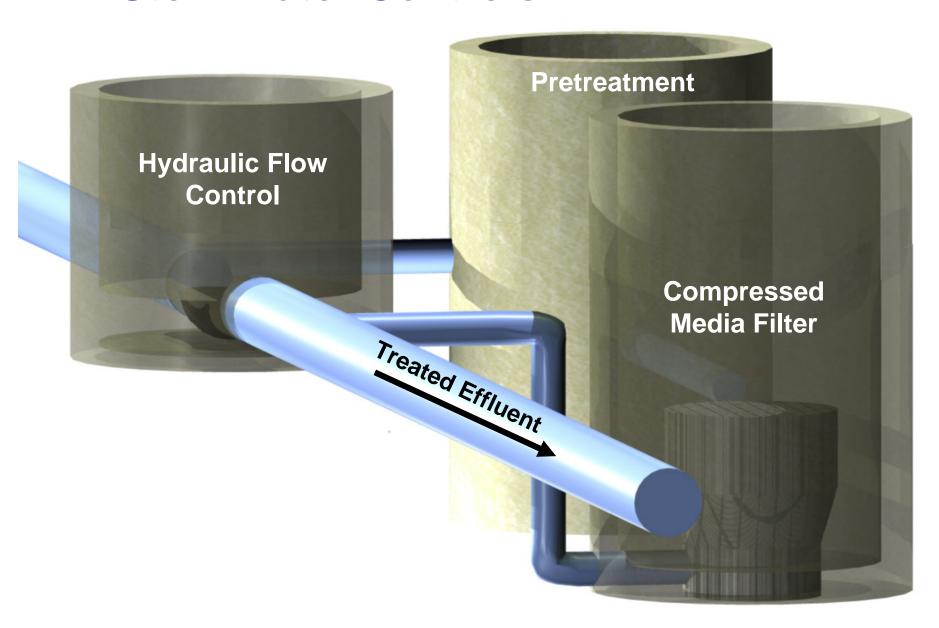




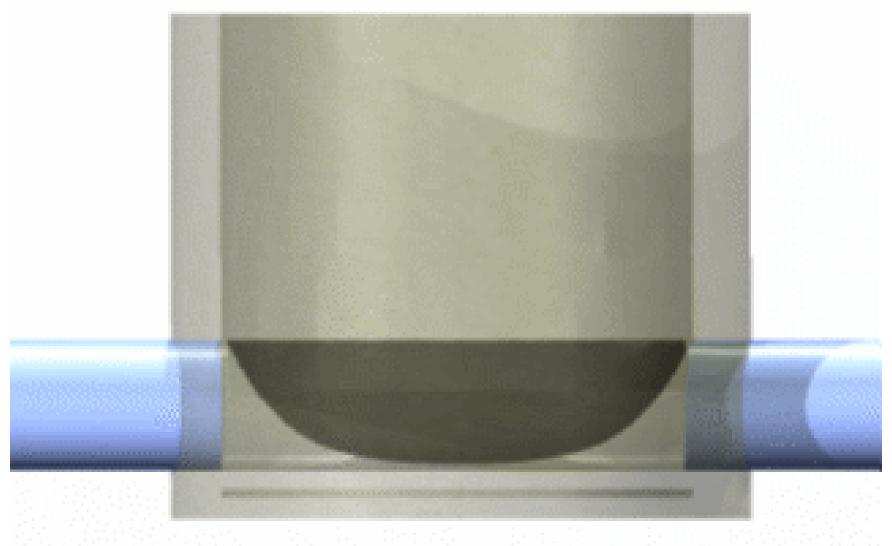
Columbus, GA Stormwater Treatment



Stormwater Controls



WWETCO Hydraulic Flow Control Patented









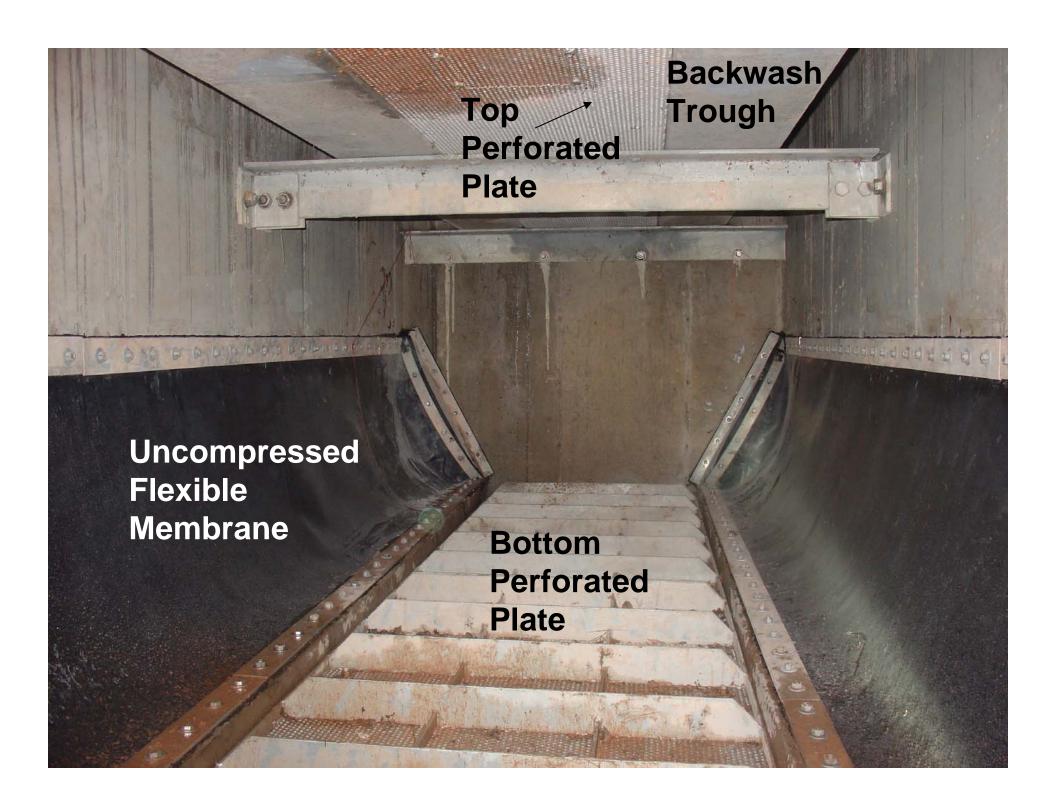


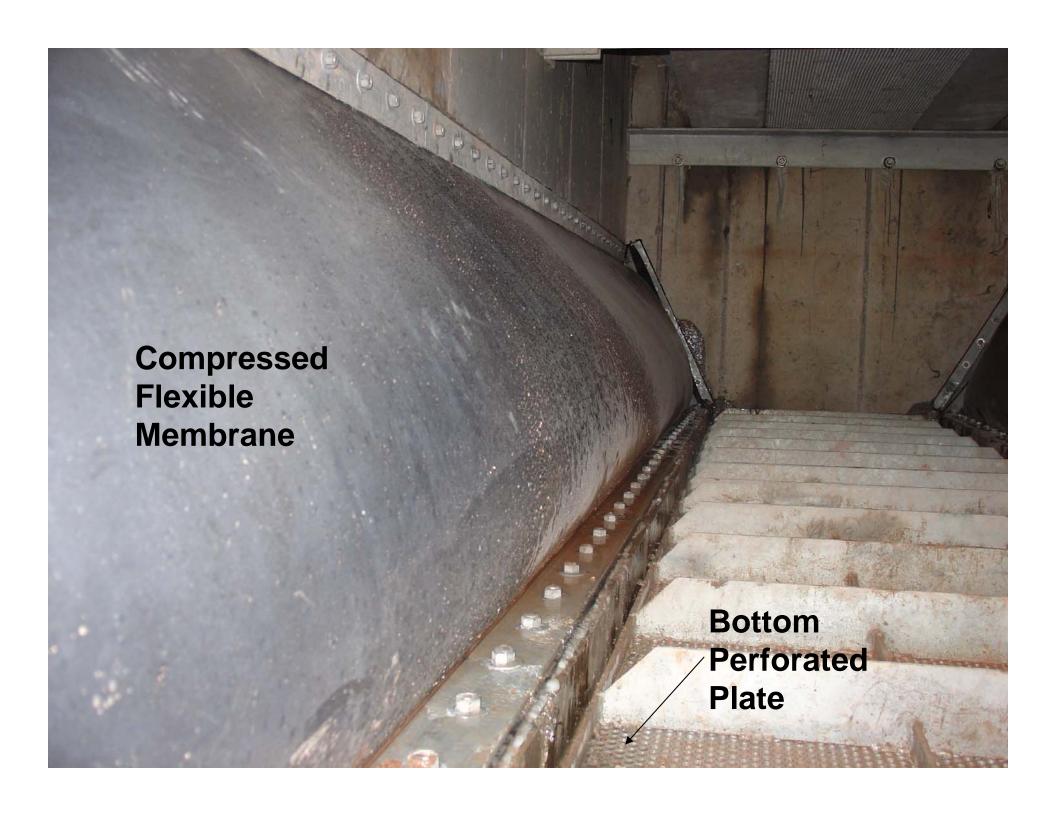


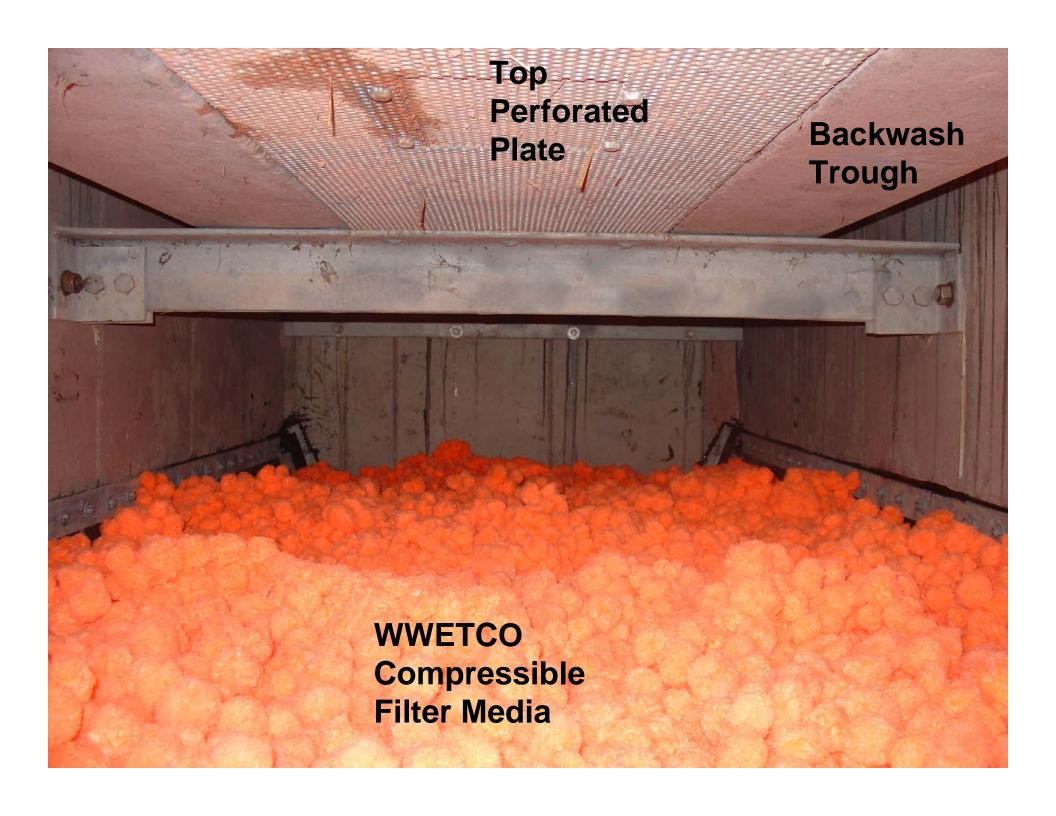
Perforated Plate & Backwash Troughs

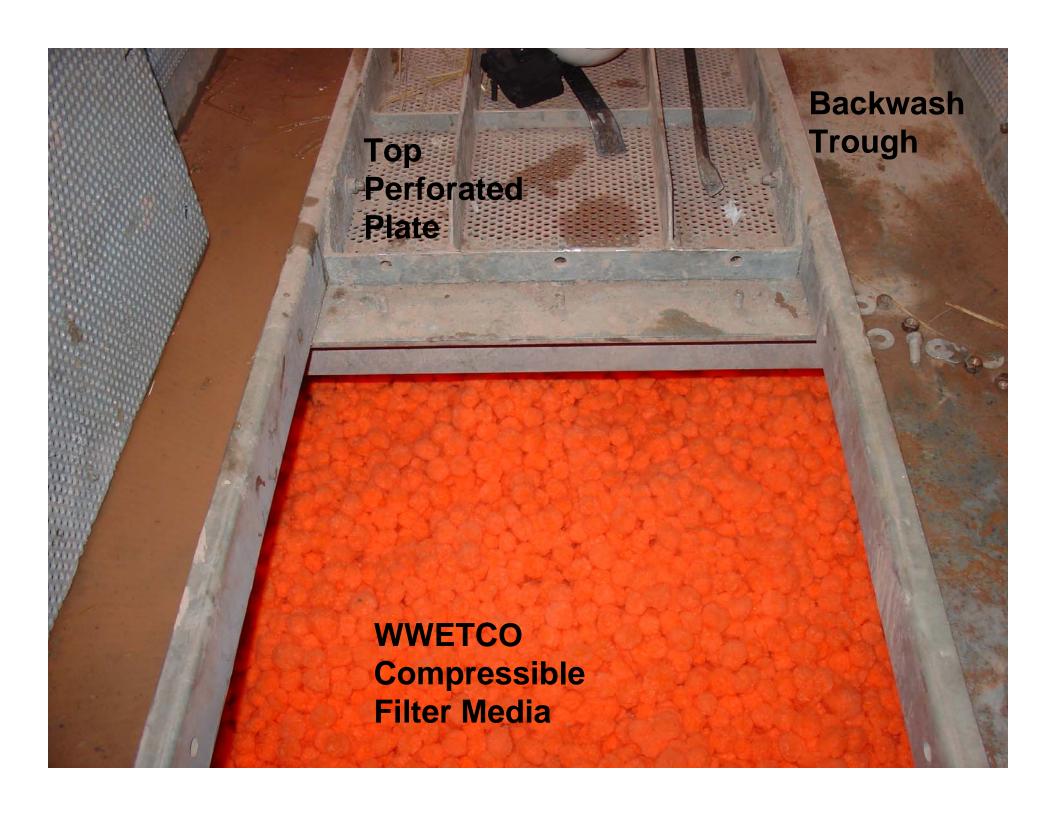
Top

Bottom Perforated Plate









Top
Perforated
Plates

Filter Influent

> Backwash Trough

WWETCO
Compressible
Filter Media

